State of Texas Assessments of Academic Readiness (STAARTM) On-Track Measure Questions and Answers

Defining the STAAR On-Track Measure

1. What is the STAAR on-track measure?

The STAAR on-track measure provides information about whether a student is on track to be at or above the Level II standard in a future target year. Whether a student is on track or not is measured by using a student's gain score (the difference between the score a student achieved in the prior year and the score a student achieved in the current year). Individual students are then categorized as *Not On Track* or *On Track* toward the target year.

2. For what standards is the STAAR on-track measure calculated?

In 2014, the STAAR on-track measure is calculated and reported for all of the Level II standards. This includes the phase-in 1, phase-in 2, and final recommended Level II standards.

3. For what grades and content areas is the STAAR on-track measure reported?

The STAAR on-track measure will be reported for students in grades 4 through high school in reading/English and mathematics. In 2014, on-track measures are available only for reading in grades 4–7 and in mathematics for grades 4–8. The STAAR on-track measure will also be available for Algebra I and English II in future years.

In order to calculate the STAAR on-track measure, three assessments covering the same content area must be available (previous year, current year, and target year). For example, on track can be calculated for grade 8 mathematics (current year assessment) because the previous year assessment was grade 7 mathematics and the target year assessment will be Algebra I, all three of these assessments measure mathematics. However, on track cannot be calculated for grade 8 reading because the next assessment in a traditional course-taking sequence will be English I, which includes both reading and writing content. Therefore, although the previous year assessment (grade 7 reading) and the current year assessment (grade 8 reading) cover the same content area, the target year assessment (English I) covers additional content and an on track measure cannot be calculated. In addition, the STAAR on-track measure cannot be calculated for English I since the previous year assessment (grade 8 reading) covers different content.

4. What are the STAAR on-track target years?

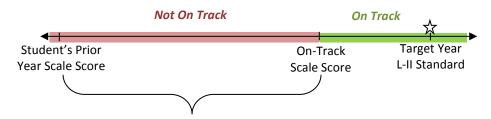
The STAAR on-track measure target years are grade 5, grade 8, and STAAR end of course (EOC) assessments. The following table lists the current year assessment and the corresponding on-track target assessment for which the STAAR on-track measure is calculated. Italicized assessments are those where the STAAR on-track measure is not available in 2014 but will be available in future years.

Mathematics		English Reading / English		Spanish Reading	
Current Year	On-Track Target	Current Year	On-Track Target	Current Year	On-Track Target
Grade 4	Grade 5	Grade 4	Grade 5	Grade 4	Grade 5
Grade 5	Grade 8	Grade 5	Grade 8		
Grade 6	Grade 8	Grade 6	Grade 8		
Grade 7	Grade 8	Grade 7	Grade 8		
Grade 8	Algebra I	English II	English III		
Algebra I	Algebra II				

5. How are the STAAR on-track classifications (*Not On Track* and *On Track*) determined for vertically-scaled tests?

The method for measuring on-track takes into account the differences between the performance standards on the vertical scale.

This method assumes that gain scores observed this year will be repeated proportionately to the changes in the Level II standards (phase-in 1, phase-in 2, and final recommended) in future years. The STAAR on-track measure acknowledges that the changes in the standards across the vertical scale are not uniform and adjusts the expected gain accordingly for future years.



Gain score required to be On Track ("On-Track Value")

The STAAR on-track classifications are determined by comparing a student's gain score—the difference between the student's current year score and prior year score—to a target gain score ("On-Track Value"). See question 10 for more information about the calculation of the STAAR ontrack measure.

6. How are the STAAR on-track classifications (*Not On Track* and *On Track*) determined for EOC assessments?

The STAAR on-track measure for Algebra I is calculated using a *z-score* approach because grade 7 and 8 scores are measured on a different scale than that of Algebra I. Rather than using the units of the scales, which in this case are different from grades 7 and 8 to Algebra I, a *z-score* converts scores into standard deviation units that can be compared regardless of scale. Thus, student scores from

grades 7 and 8 mathematics and the Algebra I Level II performance standard are converted to a z-score scale as follows:

$$z = \frac{student\ score - LII\ standard}{standard\ deviation}$$

This puts all of the values on the same scale so that an on-track measure can be generated. For example,



Gain scores can be measured on the *z-score* scale. If the gain score from grade 7 to grade 8 is repeated from grade 8 to Algebra I and the student achieves the target at the Level II standard, then the student is *On Track*. This method is currently used to calculate the STAAR on-track measure for grade 8 mathematics, and will also be used to calculate the STAAR on-track measure in future years for Algebra I and English II.

This approach determines the gain needed to be on track by equally dividing the distance between grade 7 to grade 8 and grade 8 to Algebra I. It is not necessary to divide the distance proportionally, as is the vertical-scale approach used for on-track to grades 5 and 8, because the *z-score* conversion already accounts for any non-uniform change in the Level II standards.

7. Are there any exceptions to the Not On Track and On Track definitions described above?

Yes. There are some places on the STAAR scale, specifically at the extreme high and low ends of the scale, where the application of the *Not On Track* and *On Track* definitions would not be appropriate. At the extreme ends of the scale, unlike the rest of the scale, answering one more question correctly results in large differences in scale scores. For this reason, several places on the scale have been identified as exceptions to the *Not On Track* and *On Track* definitions.

- Students who maintained Level III performance from the prior year to the current year will be classified as being *On Track* to all Level II standards in the target year.
- Students scoring at or below chance in the current year will be classified as being Not On Track to all Level II standards in the target year.

Chance represents the score that could be reasonably obtained by guessing alone. For the reading and mathematics tests, chance is defined as ¼, or 25%, of the possible multiple-choice raw-score points since these questions have four answer options. The end of course (EOC) English tests also include short answer questions and essays that are then weighted and combined to compute the total-test score. For these tests, chance is defined as ¼, or 25%, of the possible multiple-choice points, plus the weighted value associated with summed scores of 2 on the essays (representing a rubric score of 1 from both readers), and scores of zero on the short answer questions.

Applying the STAAR On-Track Measure

8. Is on-track measured for all students in Texas?

On-track is measured only for students who take STAAR assessments. In 2014, there is no on-track measure for STAAR Modified, STAAR Alternate, or English language learners (ELLs) who test in English and are eligible for the ELL progress measure. No on-track measure is available for STAAR Modified since 2014 is the last year the STAAR Modified assessments will be administered. In 2016, after two years of data are available, the on-track measure can be calculated for the redesigned STAAR Alternate assessments. The ELL progress measure already incorporates on-track information so no additional indicator is needed.

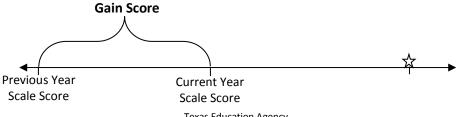
9. Why do some students not receive an on-track measure?

Only students who receive the STAAR progress measure receive the on-track measure. For the eligibility criteria for the STAAR progress measure, see the State of Texas Assessments of Academic Readiness (STAAR) Progress Measure Questions and Answers document located at: http://www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25769806844&IibID=25769806844

10. How can I calculate my student's STAAR on-track measure?

In order to calculate a student's on-track measure, the following information is needed:

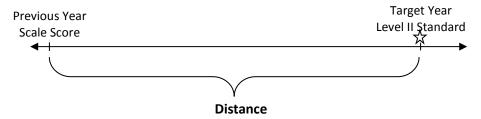
- Test information from the current year, including
 - STAAR progress measure
 - o Grade level
 - o Content area
 - o Test language (English or Spanish)
 - Scale score
 - Level II performance standards (phase-in 1, phase-in 2, and final recommended)
- Test information from the prior year, including
 - Grade level
 - o Content area
 - Test language (English or Spanish)
 - Scale score
 - o Level II performance standards (phase-in 1, phase-in 2, and final recommended)
- Test information for the target, including
 - o Grade level
 - Content area
 - Test language (English or Spanish)
 - Level II performance standards (phase-in 1, phase-in 2, and final recommended)
- Gain score = Current-year scale score Prior-year scale score



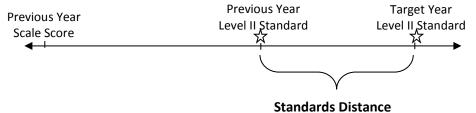
Spring 2014

The following five steps are used to calculate on track for the Level II standard of interest. The five steps can be repeated to determine on track for each of the three Level II standards—phase-in 1, phase-in 2, and final recommended.

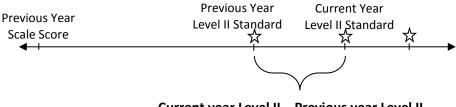
1. Calculate the distance in scale score points that the student must progress from the prior year to the target year (**Distance** = Target year Level II standard – Previous year scale score).



 Calculate the distance between the Level II standards from the prior year to the target year (Standards Distance = Target year Level II standard – Previous year Level II standard).

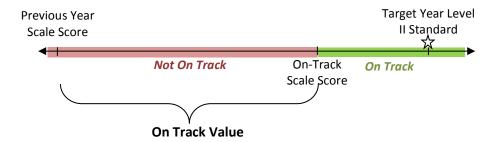


 Determine the proportion of the change in standards from the previous year to the current year (1st year proportion = Current year Level II standard – previous year Level II standard / Standards Distance).

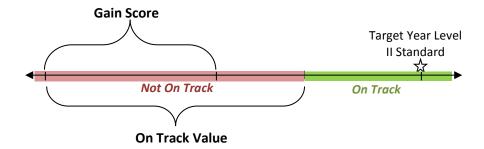


Current year Level II – Previous year Level II
/Standards Distance

4. Find the amount of gain that a student must achieve from the previous year to the current year in order to be *On Track* to the target year (**On-Track Value** = **1**st **year proportion** * **Distance**).



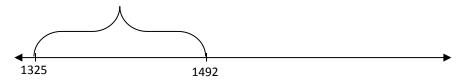
5. Compare the student's **gain score** to the **On-Track Value**. If the **gain score** is greater than or equal to the **On-Track Value**, then the student is classified as *On Track*. Otherwise, the student is classified as *Not On Track*.



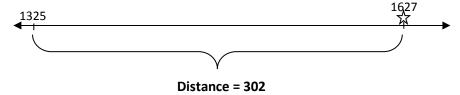
The following example shows in detail how the STAAR on-track measure is calculated for determining whether a grade 4 mathematics student is *On Track* or *Not On Track* to the final recommended level II standard of 1627 for grade 5 mathematics. In the example below, the student characteristics are as follows

	Grade	Scale Score	Level II Final Standard
Prior Year	3	1325	1529
Current Year	4	1492	1599
Target Year	5	-	1627

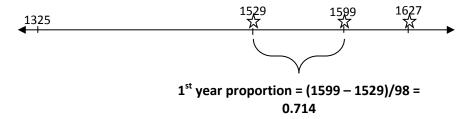
Gain Score = 1492-1325 = 167



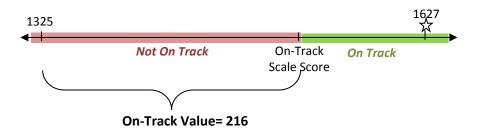
1. Calculate the distance in scale score points that the student must progress from the prior year to the target year. (**Distance** = Target year level II standard – Previous year scale score = 1627 – 1325 = 302)



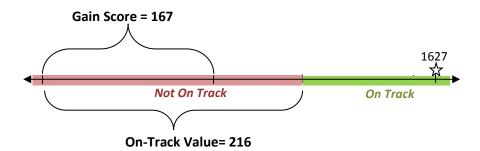
 Calculate the distance between the Level II standards from the prior year to the target year (Standards Distance = Target year Level II standard – Previous year Level II standard = 1627 – 1529 = 98). 3. Determine the proportion of the change in standards from the previous year to the current year $(1^{st}$ year proportion = Current year Level II standard – previous year Level II standard / Standards Distance = (1599 - 1529)/98 = 0.714).



4. Find the amount of gain that a student must achieve from the previous year to the current year in order to be *On Track* to the target year (**On-Track Value** = **1**st **year proportion** * **Distance** = 0.714*302 = 216).



5. Compare the student's **gain score** to the **On-Track Value**. Here, the gain score is <u>not</u> greater than the **On-Track Value** (167 < 216), <u>therefore the grade 4 mathematics student is *Not On Track* to the grade 5 final recommended level II standard of 1627.</u>



Repeat this five-step process using the phase-in 1 and phase-in 2 Level II values in place of the final recommended Level II values to determine whether the student is on track to the grade 5 mathematics phase-in 1 and phase-in 2 Level II values.

Reporting the STAAR On-Track Measure

11. How will the STAAR on-track measure be made available?

In 2014, the STAAR on-track measure for phase-in 1, phase-in 2, and final recommended Level II will be included in district accountability files and within the district view of the student data portal. This information will <u>not</u> be reported on Confidential Student Reports (CSRs).

Interpreting the STAAR On-Track Measure

12. How is the STAAR on-track measure useful to parents, teachers, and administrators?

Scale scores and performance levels convey information about how a student performed in the current year. Progress measures communicate how much the student has improved from the prior year to the current year. The STAAR on-track measure provides additional information by determining whether the student's current performance level combined with the student's progress from last year to this year has the student on track to reach Level II performance (phase-in 1, phase-in 2, and final recommended standards) in the target year. When used together, this information provides a more complete picture of the student's achievement.

For example, a student may have achieved the phase-in 1 Level II standard and *Met* progress, but the student may not be *On Track* to the phase-in 2 or final Level II standards in the target year. This information could help parents, teachers, and administrators identify students for early interventions to prevent them from falling behind in the future.

STAAR On-Track Measure and Accountability

13. Is the STAAR on-track measure used for accountability?

No. The STAAR on-track measure is not included in the accountability system.

Development of STAAR On Track Measure

14. Why did Texas develop and implement the STAAR on-track measure?

Texas Education Code §39.034(d) mandates the development of a measure to determine the necessary annual amount of improvement required for a student to be prepared to perform satisfactorily on grade 5, grade 8, and EOC assessments. To meet these requirements, the Texas Education Agency developed the STAAR on-track measure. In doing so, the goal was to provide additional information about student performance that builds upon the existing STAAR progress measure.